A study of global best practice in government funds: The opportunity for the LGPS

February 2016
Executive Summary

The details of the new Local Government Pension Scheme (“LGPS”) arrangements are yet to be agreed, but the principles are clear: to reduce costs while maintaining overall investment performance. Our aim in this paper is to identify best practice in the design of equivalent-sized investment organisations in an attempt to maximise the chances of achieving these twin objectives.

The issues which we believe need to be considered are:

- Governance
- Investment strategy
- Infrastructure investment
- Transparency
- Time horizon
- Management of costs
- The balance between costs and return
- Implementation and operational factors.

For enlightenment, we looked at nine funds from around the world which could act as role models for the new UK arrangements. These range from the huge £545 billion Norwegian sovereign wealth fund to the relatively small £13 billion New Zealand Super Fund.

The reorganisation of LGPS offers an excellent opportunity to set new standards of governance, performance and costs in the management of public sector pension investments. Based on our investigation of international comparators, we suggest three principles that could usefully inform the structure of the new arrangements:

**Governance** – any new investment pools should have clarity of objective, independence of action and transparency in operation. It is important, too, that the new funds promote a long-term culture as investors.

**Performance** – creating the conditions for good performance is at least as important as reducing costs. Any outperformance relative to costs will help reduce funding deficits and assist schemes in meeting their targets.

**Costs** – while we accept that there is considerable scope to reduce costs in the LGPS, this should not override the ambition to build professional and properly resourced asset pools. There is a three-way trade-off between size, cost reduction and performance.

We believe there is a convincing case for establishing these principles at the heart of the new funds. Were that to happen, we think they would have an excellent chance of achieving their objectives of cutting costs while maintaining performance and, at the same time, establishing the LGPS as a world leader in public sector fund management.
Our analysis of best practice suggests that the following ten features should be adopted in the design of the asset pools:

**Governance** – each asset pool should have an independent board of up to ten members, appointed for their experience and expertise, not as representatives of particular stakeholders.

**Mission clarity** – there should be a clear statement of mission for each pool based on enabling the authorities to deliver an excellent performance outcome and hence secure pensions for their members.

**Long-term culture** – as many measures as possible should be adopted to create a long-term investing culture.

**Transparency** – each pool should publish quarterly reports focussing on long-term returns and value added against a minimum cost reference portfolio.

**Asset allocation** – should remain in the first instance with the underlying authorities. The asset pools, in common with investing institutions elsewhere, will build up asset allocation skills over time, and it would make sense to keep open the option of their ultimately assuming responsibility for asset allocation.

**Resourcing** – resourcing of each pool needs to be sufficiently robust not only to run a series of pools in listed investments but also, as appropriate, direct private market investments and customised mandates.

**Flexibility** – the sponsoring authorities should have the right to transfer from one pool to another, but only after a minimum period of, say, ten years.

**Budgeting** – the operating costs of the pools should be treated as a cost to investment returns of the pools and not taken from public sector budgets.

**Costs** – the pools should aim to reduce costs substantially from current LGPS levels, but not to the extremes proposed in the Hymans 2013 report. A level of 30–35 basis points for direct investment costs would be low by international standards but would leave room to generate good returns.

**Infrastructure** – a single national infrastructure pool should be created, which would invest both in the UK and globally.

For further information, please contact your Client Director, usual Schroders contact or **Gavin Ralston**, Head of Official Institutions, 020 7658 6394 or gavin.ralston@schroders.com
Contents

3 Introduction

4 International Comparisons

5 Governance

8 Investment Strategy

13 Infrastructure Investing

15 Multi-fund Pensions Structures – Sweden and Chile

18 Costs

22 Implementation and Operational Factors

23 Conclusions

24 Appendix 1: Governance

27 Appendix 2: Best Practice for Asset Owners (Clark and Urwin)

A study of global best practice in government funds: the opportunity for the LGPS
This paper sets out to address the issues arising out of the changes currently being made to the Local Government Pension Scheme (“LGPS”). Although these changes have not yet been articulated in detail, the principles behind them were set out by the Chancellor in the July Budget of 2015:

“The Government will work with the LGPS administering authorities to ensure that they pool investments to significantly reduce costs, while maintaining overall investment performance”.

Our aim here is to identify best practice in the design of an investment organisation, in an attempt to maximise the chances of achieving the twin objectives outlined by the Chancellor: cutting costs while maintaining performance. We do so in particular by examining successful asset owners outside the UK.

Little detail has yet emerged on how the new asset pools will be organised and governed, and what their relationship will be with the sponsoring local authorities.

We do not, for example, know whether the local authorities will retain responsibility for setting asset allocation in the light of their liabilities (although the Department for Communities and Local Government (“DCLG”) said in its consultation response in November 2015 that they should1). Nor do we know if the asset pools will be run with a standard allocation based on the aggregate liabilities of the participating authorities. A third uncertainty is whether the authorities will have a role in the governance of the asset pools, or will use them on an arm’s length basis as managers, giving them the freedom to move from one pool to another.

The DCLG in its consultation response said it expected that “authorities will develop proposals for no more than six pools, each with at least £25 billion of [LGPS] assets.”2 Since there is limited evidence within the UK of running asset pools of this size at a national level, we looked at similar entities around the world. In particular we looked at instances where multiple public authorities use a single investment pool, and where there are multiple pools aiming to achieve the same objectives.

The issues which we believe need to be considered are:

- Governance
- Investment strategy
- Infrastructure investment
- Transparency
- Time horizon
- Management of costs
- The balance between costs and return

1 Local Government Pension Scheme: Opportunities for collaboration, cost savings and efficiencies – Consultation response, DCLG, November 2015.

2 DCLG consultation response as above.

“Our aim here is to identify best practice in the design of an investment organisation, in an attempt to maximise the chances of achieving the twin objectives outlined by the Chancellor.”
Implementation and operational factors. There are six sovereign wealth funds (as defined in the database of the Sovereign Wealth Fund Institute, a specialist information group) between £25 billion and £35 billion, which is the likely size of each of the UK asset pools. Of these six, only two publish enough data to permit analysis of their organisation and governance.

We have therefore broadened the peer group to include a mix of funds of different size, purpose and country of origin, but all of which publish extensive data on their governance, operations and results. They are:

<table>
<thead>
<tr>
<th>Country of origin</th>
<th>Fund</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>Alaska Permanent Fund (£33.6 billion)</td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>Canada Pension Plan Investment Board (&quot;CPPIB&quot;) (£134.7 billion)</td>
<td></td>
</tr>
<tr>
<td>Norway</td>
<td>Government Pension Fund Global (£552 billion)</td>
<td></td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Superannuation Fund (£13.7 billion)</td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>Future Fund (£58.5 billion)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Victorian Funds Management Corporation “VFMC” (£23.7 billion)</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>Fonds de Réserve pour les Retraites “FRR” (£28.9 billion)</td>
<td></td>
</tr>
</tbody>
</table>

The Norwegian and Canadian funds are substantially larger than is envisaged for the UK asset pools, but they nonetheless provide useful comparisons in the public sector.

In addition to the seven funds listed, we comment on the Chilean and Swedish systems, both of which have multiple funds aiming to meet similar objectives to the proposed UK funds, as well as the Universities Superannuation Scheme ("USS"), the second largest pension fund in the UK.

4 The two US funds are the only ones to publish comprehensive reports. Given their characteristics, we concluded that the Alaska fund was more representative of the type of arrangements likely to be adopted in the UK.
The creation of the new asset pools in the UK is an excellent opportunity to design a set of institutions with world leading standards of governance. We believe that achieving this will determine the success of these bodies, especially as they will be in the public eye, and will need to balance the interests of multiple stakeholders: individual members, the administering local authorities, and the Government. An ambition to build excellent governance into the design of the asset pools is consistent with the DCLG’s desire to create “British Wealth Funds”. This phrase is clearly a misnomer as the LGPS is a pension fund rather than a wealth fund, but nonetheless its use suggests an aspiration to build institutions with many of the same characteristics as sovereign wealth funds, with reputations to match the best.

We have analysed below (see Appendix 1) the governance of a number of asset owners outside the UK that have achieved good returns for their stakeholders and are respected globally. From this analysis we have identified certain common factors that are consistent with academic findings. Some of these asset owners are much bigger than the intended LGPS pools in the UK, but they share the features of being subject to intense public scrutiny and a focus on both costs and returns. We have also drawn on the OECD guidelines for the management of pension funds.

### i. Elements of Best Practice

Consistent with the current focus on good corporate governance and stewardship, a substantial literature has been published on the value to pension funds and other asset owners of effective governance. Keith Ambachtsheer and two other academics concluded in a 2007 paper that good governance can raise returns by as much as 1-2% per annum. In another paper from 2007, two other academics, Gordon Clark and Roger Urwin, proposed a set of twelve factors (see Appendix 2) that they see as consistent with good governance and which have set standards in this area. A 2014 survey, by Ambachtsheer and John McLaughlin, another academic, concluded that the effectiveness of the boards of investing institutions globally had improved but still had shortcomings, and that there appeared to be a positive link between the quality of governance and the ability of institutions to invest long term.

There are five key elements that we believe should form part of the governance structure of an investing institution:

- **Clarity of mission** – there should be clarity about what each asset pool is aiming to achieve and how it should be judged. The primary objective of any asset owner should be to deliver high long-term returns, subject to an acceptable level of risk; for the asset pools, this could be at the total fund or individual asset class level. Good examples of institutions that publish a clear statement of their mission and beliefs are the Alaska Permanent Fund and the Future Fund. In the case of the LGPS, we believe that the mission of the pools should be to deliver an excellent performance outcome and enable the authorities to meet their pension liabilities. If cost minimisation is stated as part of the mission at all, it should be a secondary objective.

- **Separation of powers** – the governing body should be separate from the management entity. The governing body is responsible for the appointment of the key roles in the management entity and for oversight of investment decisions, but does not participate in day to day management. All the institutions we have reviewed adopt this approach.
- **Transparency of nomination process** – there needs to be a robust and transparent nomination process for members of the governing body. Board members should be appointed for their integrity and expertise in investment and not simply to represent a particular constituency. The number of board members should be kept small, ideally below 10.

- **Independence** – board members should be independent of the local authorities and should represent the best interests of all participants in the asset pools. (Indeed the Future Fund in Australia goes further and specifically excludes anyone inside government from serving on the governing body.)

- **Remuneration policy** – this should be set by the governing body and not by an outside stakeholder. Remuneration, like other expenses, should come out of the costs of each asset pool rather than being subject to appropriations from government budgets. The international experience is that it is important for public institutions to be able to offer competitive packages; ideally potential employees will also be attracted by the prestige of working for a globally respected institution.

**ii. Operating Asset Pools – the Australian Case**

We have looked in greater detail at the experience of Australia, where the structure of public investment funds is close to what the UK is looking to achieve, i.e. a small number of public institutions aggregating investment expertise (in Australia’s case, at the state level) on behalf of a larger number of investing authorities. These state institutions also happen to be of a similar size to the minimum £25 billion proposed for the UK. The Australian approach is interesting because three states, Victoria, Queensland and New South Wales, have chosen different structures for their public sector investment entities.

The following case studies look at two of these institutions:

---

**Case Study – Victorian Funds Management Corporation (“VFMC”)**

VFMC was established in 1994 to “provide investment and funds management services to Victorian public authorities in a commercially effective, efficient and competitive manner”. As of June 2015 it managed the equivalent of £24.8 billion, with most public authorities in Victoria (defined benefit and defined contribution pensions, and public insurers) required to use VFMC for fund management. The Corporation runs a series of individual asset class pools in both public and private markets, including infrastructure, whose results are published, but it also manages the asset allocation for 20 underlying clients. It agrees target returns with each client, usually an annual margin above consumer price inflation over an explicit long-term time horizon, either five or ten years.

VFMC is governed by a board of four to nine members appointed by the State Treasurer, with a staff of 80 reporting to a chief executive who is accountable to the board. Investments are managed both internally and by external managers; VFMC meets all costs, including salaries, out of the management fees its clients pay, and any profit goes to the state. Total costs, including fees paid to external managers, in the latest year were 34 basis points (bps – one basis point is equal to 0.01%) of assets.

---

“Board members should be independent of the local authorities and should represent the best interests of all participants in the asset pools.”
In March 2014, the state of New South Wales, which previously had three investment entities, announced that it would move to a centralised model similar to that in Victoria and Queensland. It proposed the amalgamation of the investment and back office teams in its three public fund management bodies – TCorp, State Super and WorkCover NSW. Unlike the others, however, this model involved no legal amalgamation of the entities concerned, simply the creation of a single investment platform under TCorp.

In this case, complexity of legislation and the unusual status of the three bodies made it impractical to create a single legal entity. As a result, each of the previously separate fund management bodies retains governance responsibility for its own assets, and TCorp has put in place client facing teams (mainly asset consulting expertise) to manage its relationship with the other two asset owners. As in the UK, there is an expectation that cost savings will result from the concentration of buying power and streamlining of the platform. These new arrangements were in place as of December 2015, but there is likely to be a further process of review and rationalisation in 2016.

We would argue that the QIC model is an option for the asset pools only after several years of building their credibility, but VFMC is worth further consideration as a successful precursor to the new LGPS structure.

“VFMC is worth further consideration as a successful precursor to the new LGPS structure.”
i. Setting Objectives

The primary objective for the LGPS should be to secure the funding of future pension liabilities. At the last triennial valuation, on March 31, 2013, the average funding level of the LGPS was 79%, with individual authorities falling into a range from 56% to 101%. This level of deficit, combined with the strength of the employer covenant, argues that most authorities in the LGPS should continue to take relatively high levels of investment risk. However, the covenant is complicated by the fact that central government does not want to be the ultimate underwriter of the liabilities. This could have an impact on the provision of other local government services if deficits have to be met by local authorities themselves.

The primary objective of any defined benefit pension fund should be to increase the funding of liabilities to the point where investment risk (or the risk to the employer of additional contributions) can be minimised. Before reaching this point, the fund should target an investment return that meets or exceeds the “returns” on its liabilities.

In contrast, much of the debate about the LGPS has focussed on reducing investment costs. We have modelled in Figure 1 below the impact on the deficit over time, starting from the 2013 valuation, of an improvement in net returns of 0.25% per annum (which could be achieved by driving costs to the minimum) and 1% per annum (which could be reached only by higher returns or a combination of lower costs and higher returns).

Against a 2013 deficit of £46 billion, the difference between the two lines is material—holding all other assumptions the same, including employer contributions, a 1% incremental return would mean that the LGPS was better funded by a cumulative £35 billion by 2023. (Note that, as we have ignored any change in the deficit between 2013 and 2016, these illustrations are unlikely to reflect the actual position.)

Clearly there is no guarantee that higher returns can be achieved, but the point of the chart is to demonstrate the benefits from attempting to maximise investment returns, rather than simply reducing costs.

As argued above, it is important that the asset pools have clear objectives against which they can be judged, both by their governing boards and public stakeholders. This issue is complicated by the fact that we do not know whether the pools will run a series of individual asset class pools in which the authorities can invest in line with asset allocations set by themselves; or if the pools will design a series of individual asset allocations based on the liabilities of each authority but using the same underlying asset components.

In any event it is critical that there is clear agreement between the authorities and the asset pools on aims. These should either be the objectives for each asset class, or an aggregate performance target for each client.

“The primary objective of any defined benefit pension fund should be to increase the funding of liabilities to the point where investment risk... can be minimised.”

Figure 1: Potential cumulative improvement in the LGPS deficit with higher net investment returns

The Importance of Asset Allocation

Much of the academic literature argues that asset allocation is the key to investment success. A reminder of its importance is that even the best active manager in one asset class will often underperform the worst asset manager in another. In the example from the US in Figure 2, the impact of the asset allocation decision was demonstrably more significant than the active-passive decision. Thus, for instance, the difference between the index returns of US large cap equity and US investment grade bonds was approximately 12% over the 3-year period – far more than differences in returns within each asset class.

Whether and how much to allocate to different asset classes is therefore a critical decision. It is also inescapably active – it is impossible to make a “passive” asset allocation decision even if it is simply setting a strategic asset allocation and rebalancing periodically.

However they manage their portfolios, investors cannot therefore avoid making a decision about which broad categories of assets to use: equities, bonds, property, alternatives, etc. Once that course has been charted, the investor needs to make a decision on what vehicle or vehicles to use: whether to use active or passive management to gain access to an asset. We have not reviewed this issue further in this paper. We assume that passive security selection will play an important part, alongside active, in the management of the asset pools.

Given the importance of asset allocation, clarity over who is responsible for it is critical to the success of the new LGPS arrangements. We have set out below the arguments for and against centralising asset allocation in the asset pools:

We note that the consultation produced “unanimous agreement…that asset allocation should remain with the administering authorities” and that the DCLG agreed with this conclusion. The DCLG document goes on to argue for the benefits of the democratic link where an individual authority both sets and is accountable for asset allocation. However, the Department does qualify its case by suggesting that pension committees should focus on the split between bonds and equities, which implies that responsibility for overall asset allocation (which is likely to embrace a broader range of asset classes than just bonds and equities) is divided uncomfortably between the asset pools and the authorities.


This lack of clarity is important as pension scheme investment management is complicated by the need to take account of liabilities when setting asset allocations, with liability-driven investment techniques being widely adopted to manage risk. Whatever model is adopted, it is important that accountability for asset allocation, as the single most important driver of investment return, remains clear. In addition, if the authorities retain responsibility for asset allocation, they will need access to the relevant skills to give them the best chance of making these critical decisions successfully.

Although the transfer of asset allocation would represent a much more radical shift of responsibility than is currently envisaged, we believe that this option merits further debate. Such a shift may be a step too far in the short term but, as the asset pools mature and establish credibility, there may be a stage in the future when they can be actively involved in setting asset allocation.

### iii. Implementing Strategy

How the asset pools set investment strategy will depend on their relationship with the administering authorities. If the authorities retain control of asset allocation, the role of the pools will be to run a series of asset class funds, e.g. UK equities, global equities, bonds, property, private equity, infrastructure etc. In these circumstances, the pools will still need to define a set of investment beliefs based on, for example:

- The probability of active management outperforming passive, net of fees
- The rewards to any persistent factor biases in equity and bond investing
- The balance between internal and external management
- The extent to which non-financial factors, such as sustainability, should be incorporated into security selection.

The pools should also define target returns and risk levels relative to each of the asset classes in which they offer a fund; for alternative asset classes these parameters should be expressed in absolute terms.

If, on the other hand, the asset pools are responsible for the asset allocation of the individual authority, there will need to be an additional set of principles covering how each pool will go about designing a portfolio designed to outperform liabilities. This will cover expected returns, volatility and covariance of each asset class, beliefs about diversification, the premium assumed to be derived from illiquidity and a strategy for alternatives.

The key appointment in any investment organisation is the chief investment officer, who will take ownership of designing the principles and beliefs to be approved by the board, then implementing a strategy consistent with them.

---

13 These are approaches based on seeking investments that share certain common characteristics, such as value, growth or momentum.
Each pool will also need a chief executive officer, who will be accountable to the regulator and responsible for the operational aspects of the pool and communication with stakeholders. This dual management structure is common among similarly sized funds. The level of staffing will be a function of the extent to which management is outsourced and the use of private market assets.

As a guide, the board will need to set remuneration strategy for staff and, in particular, ensure alignment with the pool’s long-term objectives. This will ideally take the form of an incentive compensation scheme linked to the pool’s performance over periods of 3–5 years. A key decision is whether to link compensation to the performance of that part of the pool for which each individual is responsible (e.g. an equity portfolio’s performance against an equity benchmark) or to the performance of the pool as a whole. We believe that the best outcomes are likely when individuals are aligned with the performance of the whole portfolio.

iv. Transparency

Public sector entities in democracies have a duty to be transparent in all their dealings. However, for investment funds, transparency involves trade-offs since it can create a risk of excessive focus on short-term outcomes, which may lead to a misalignment of incentives between manager and owner.

The most common approach is to publish quarterly reports between two and six weeks after the end of the reporting period. Giving investment performance over short and long periods, these provide some form of performance attribution by asset class and show costs, current asset allocation and details of significant transactions. Most also include an audited balance sheet and cash flow statement.

A powerful discipline (best shown by the Future Fund and the New Zealand Super Fund\(^{14}\)) is to report value added against some form of low-cost, passive reference portfolio. This would ensure a focus on whether the costs spent to generate additional return are being justified by the outcome. Stakeholders get a clear picture of how much the pools are earning from good returns from higher markets, and how much from skill.

As exceptions to the general quarterly cycle, both the New Zealand Super Fund and the Alaska Permanent Fund publish a monthly update showing similar statistics, while the Fonds de Réserve publishes only annually. (The Alaska and Norwegian funds actually show daily asset values on their websites.) In the private sector, the Yale Endowment Fund, one of the best-known long-term investors, publishes results only annually with a significant lag.

We recommend that the asset pools should publish quarterly reports with a short time lag, but with the emphasis on returns and risk over longer periods (see the next section).

v. Time horizon – Establishing a Long-term Culture

The Kay Review (published in 2011 and referenced in the Government’s document LGPS: Investment Reform Criteria and Guidance) recommended that “asset managers and asset holders adopt measures to promote both stewardship and long-term decision making”. A stronger long-term investing culture (which we interpret as meaning five years or longer) should contribute positively to the results of both the UK and overseas companies in which the asset pools are investing. This would also address the principal-agent problem, widespread in institutional asset management, whereby the principals, in this case the administering authorities, clearly have a long-term objective (providing pensions over a multi-generational period), while the agents are often incentivised on the basis of much shorter periods and subject to frequent review. These agents can be internal staff who may not envisage working for the same employer for more than three to five years, members of pension committees who may serve a fixed term, or external managers.

“As the asset pools mature and establish credibility, there may be a stage in the future when they can be actively involved in setting asset allocation.”
A long-term investor should have an advantage over a short-term one, in that it can adopt contrarian positions, act as provider of liquidity and take advantage of pricing anomalies. Like a sovereign wealth fund, the LGPS is in a good position to reap these benefits.

The creation of the new asset pools therefore provides the opportunity to build a long-term mind-set into the organisation and governance of the LGPS. A paper published in 2014 by Geoff Warren of the Australian National University and Research Director of the Centre for International Finance and Regulation addresses this subject and makes detailed recommendations for embedding long-term thinking into the culture of an asset owner.

Below we give our suggestions:

- Set out long-term investing as an aim in a fund’s constitutional documents and align the governance structures by giving them the same objectives
- Establish a long-term performance objective (at least five years) and use this as the primary measure in reports the fund publishes
- Set up incentive structures for both internal and external managers so that remuneration is driven by long-term measures, again to be aligned with the fund’s publically stated objectives. For example, the CPPIB awards its staff incentive compensation for four-year performance that adds value, net of costs. Judgment on shorter periods – for example for a new employee – would rely on qualitative measures
- Consider awarding mandates (both internal and external) with an explicit long-term horizon and a less frequent review process than is common in the investment industry. An alternative would be to transfer an idea from the private markets (notably private equity) and lock up capital for a period of time in public equities and bonds.

vi. A Reference Portfolio

Many large institutions have moved recently from the idea of a benchmark, which represents their strategic asset allocation, to that of a reference portfolio. This is set by an asset owner, and is made up from liquid asset classes which are cheap and easy to invest in, typically public equities and government bonds. Although it is normal to use market capitalisation weighted indices, a reference portfolio can also incorporate systematic factor biases, such as value or small size in equities (Norges Bank does this).

The mix of assets in the reference portfolio should be consistent with the long-term return and risk expectations of the institution. For example, the CPPIB has a reference portfolio of 65% public equities and 35% bonds; the New Zealand Superannuation Fund has 80% equities and 20% bonds. The idea is that other asset classes are then judged by reference to this portfolio as to whether they provide a superior risk/return trade-off: for example private equity or real estate would be judged by whether their characteristics are more attractive than the assets in the reference portfolio. The board can also judge the investment staff on their decisions to allocate to asset classes not included in the reference portfolio.

15 Designing an Investment Organization for Long-Term Investing, Centre for International Finance and Regulation, October 2014.
16 UK Local Authority Quarterly Review, Q3 2015.
Infrastructure Investing

The Government expects that the proposed reforms “will enable the authorities to develop the capacity and capability to become a world leader in infrastructure investment and help drive growth”. Although it is nowhere stated clearly, it is implicit that the Government means growth in the UK.

Infrastructure investing has attractive characteristics to a long-term investor. It is likely to produce stable returns, but with stronger inflation protection than other real assets. The LGPS’s own experience is that, over the last ten years, infrastructure has returned slightly more than global equities, but substantially less than private equity.

According to the latest WM statistics, the exposure to infrastructure of the LGPS is about 1%. By contrast, the world leaders in infrastructure investing, the Canadian and Australian pension funds, have more than 5% of their assets in infrastructure: OMERS (Canada) is an outlier with 19%, the CPPIB has 5.5%, Ontario Teachers over 8% and the two largest Australian funds (Australia Super and the Future Fund) have 10% and 7.4% respectively, while QIC has 7.7%. The UK fund with the largest infrastructure exposure is USS, with 4.4% or over £2 billion.

According to the Local Government Pension Scheme: Investment Reform Criteria and Guidance, DCLG, November 2015.

However, it should be noted that, in all these cases, the infrastructure exposure is global and not confined to the home country of the investor. This diversification is logical, given that changes to the political environment (e.g. a new government may have a different view on road pricing) is an important risk in infrastructure investing. That said, the UK is already a major market for infrastructure commitments – the annual deal value in the UK in the last few years has ranged between £20 billion and £40 billion, and the UK is by far the biggest infrastructure market in Europe, with roughly three times the number of deals as France.

The appetite for diversified infrastructure exposure is reflected in the scope of infrastructure funds: of the £34 billion raised in new funds in 2014, £20 billion was for those with global or European coverage. It would therefore seem reasonable that, if the asset pools build an infrastructure capability, it should not be confined to the UK.

Case Study – Universities Superannuation Scheme (“USS”).

USS is the second largest pension fund in the UK, and the largest pension investor in infrastructure. Of its total assets of £49 billion, its strategic asset allocation weighting in infrastructure and timberland is 7.0%, although its actual weight in infrastructure is below this. The scheme has an asset management subsidiary which manages 67% of its total portfolio; its costs, internal and external, are about 20 bps of assets. For infrastructure the internal team selects funds, but also makes co-investments and direct investments. It invests both in the UK (e.g. a stake in Heathrow Airport) and overseas (e.g. several transport assets in Australia).

“Diversification is logical, given that changes to the political environment... is an important risk in infrastructure investing.”

18 Much of the data on infrastructure comes from Preqin Special Report: European Infrastructure, November 2015.
Four other points are worth making about infrastructure:

- Institutional investment in infrastructure is predominantly brownfield (estimate 70%, according to specialist data group Preqin). Greenfield deals, such as the Hinckley Point nuclear power station, are mainly done by industrial investors, although the Thames Tideway tunnel is an exception.

- Energy and renewable energy dominate: 65–70% of European investment opportunities have been in these two sectors in the last five years. Care needs to be taken to ensure diversification by sector as well as by country.

- Large volumes of global institutional money are looking for infrastructure deals. There are signs that projected internal rates of return are already falling, so investors should keep a close eye on valuations.

- This is a technical area and deals need expert and detailed scrutiny. Large internal teams (of probably at least 10 professionals) are necessary to execute deals successfully.

This last consideration argues the case that the asset pools should combine resources to create a single infrastructure pool. The rationale for this is that there are economies of scale in managing infrastructure, given the need for large internal teams. If each of the six asset pools achieved, say, a 3% weighting in infrastructure, they would each only have a portfolio of £750 million. Conversely, a combined infrastructure fund investing 3% would reach over £5 billion, which in today’s values would put it among the top ten global infrastructure investors.

A second argument is that regional asset pools would be subject to pressure to invest in regional infrastructure, which might not always be in members’ best interests. A national pool would be in a better position to run a portfolio diversified both globally and within the UK. It should also be possible to ensure that the aims of such a national pool require that all regions benefit from infrastructure investment.

“A combined infrastructure fund investing 3% would reach over £5 billion, which in today’s values would put it among the top ten global infrastructure investors.”
Multi-fund Pension Structures – Sweden and Chile

The Swedish public pension system is worth studying because at its heart lie four funds with identical mandates. There are actually five pension multi-funds, AP1, 2, 3, 4 and 6, but the last-named invests exclusively in private equity. The first four funds each manage 25% of the country’s social security contributions, and each fund pays out one quarter of the benefits due from the state pension system.

The multi-fund structure was created to:
- Reduce the funds’ impact on the domestic market
- Diversify management risk
- Enhance performance through competition
- Mitigate the risk from political interference, and
- Diversify strategic risks.

In 2011, the Swedish government launched an inquiry into the running of these funds. The inquiry recommended that, to cut costs, the AP6 fund should be merged with AP2. One out of AP1, AP3 and AP4 would also be closed. This was heavily opposed by the state pension funds, and the Swedish government has recently announced that it had rejected the suggested reforms, ostensibly because of resistance from opposition parties. However, the objections of the chairs and chief executives are also likely to have carried weight. They argued\(^1\) that the proposal would lead to lower pensions because:
- A proposed new National Pension Fund Board would be bureaucratic and would not guarantee independence from the government, with the governance of the funds still open to political micromanagement
- A proposed reference portfolio and cost cap for the funds could restrict investment and shift the focus towards shorter term performance and index tracking funds
- There was uncertainty whether the new structure would allow the funds’ boards to have sufficient control over operational decisions concerning unlisted assets
- It was feared the proposals were likely to lead to high reorganisation costs compared with the possible savings, with insufficient analysis of the potential impact

\(^1\) Letter from chairmen and chief executives of AP1-4 published in Dagens Nyheter newspaper, 23 October 2015.

“A proposed reference portfolio and cost cap for the funds could restrict investment and shift the focus towards shorter term performance and index tracking funds.”
Governance

The boards of the AP funds are appointed by the government and each consists of nine representatives.

The governance structure of the Swedish system is largely compliant with the guidelines set out by the OECD. The mandate of the first four funds is to “manage fund assets in such a manner so as to achieve the greatest possible return on the income-based retirement pension insurance. The total risk level of the investments made by the funds must be low”. This overarching objective is free to be interpreted by each fund and the broad nature of this objective has been a point of criticism by the OECD. Table 2 shows how each fund has interpreted the principle:

In respect of management teams, the AP funds offer salaries broadly competitive with the industry and are performance related. The organisations are highly regarded in Sweden, enabling the recruitment of high quality staff.

ii. The Chilean AFP Pension System

Background

Chile’s pension system is different from the others we have examined in that it is entirely defined contribution, investment choices are made by individuals, and the pension management companies (the AFPs) are privately owned. Nonetheless, the size and structure of the system make it relevant: the four established AFPs range from £15 billion to £20 billion in size. Pensioners can switch their providers at any time and reallocate their investments across funds. From 2002, a multi-fund structure was adopted in which all six AFPs each offered five different funds (Funds A–E) differentiated by their riskiness, with Fund A being the most risky and Fund E being the least (see Table 3).

The default fund for members under the age of 25 is Fund B, while Funds C and D are the default funds for members aged 36 to 50 and 51 to 56, respectively. Although there are six pension providers, the assets are concentrated in the largest four.

Table 2: Investment objectives of the AP funds – 1 to 4

<table>
<thead>
<tr>
<th>AP1</th>
<th>AP2</th>
<th>AP3</th>
<th>AP4</th>
</tr>
</thead>
<tbody>
<tr>
<td>A real (above inflation) return above 4% after expenses over rolling 10-year periods.</td>
<td>Does not disclose precise objective.</td>
<td>An average annual real return of 4%.</td>
<td>Total return to average 4.5% per annum over 10-year periods.</td>
</tr>
</tbody>
</table>

Source: Funds’ annual reports.

Table 3: Equity investment limits for Chilean pension funds

<table>
<thead>
<tr>
<th>Fund</th>
<th>Maximum allowed</th>
<th>Mandatory minimum limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fund A – More Risky</td>
<td>80%</td>
<td>40%</td>
</tr>
<tr>
<td>Fund B – Risky</td>
<td>60%</td>
<td>25%</td>
</tr>
<tr>
<td>Fund C – Intermediate</td>
<td>40%</td>
<td>15%</td>
</tr>
<tr>
<td>Fund D – Conservative</td>
<td>20%</td>
<td>5%</td>
</tr>
<tr>
<td>Fund E – More Conservative</td>
<td>5%</td>
<td>0%</td>
</tr>
</tbody>
</table>

“The organisations are highly regarded in Sweden, enabling the recruitment of high quality staff.”
Governance
AFPs are commercial enterprises where the board of directors has a fiduciary duty to its shareholders but not to the pensioners. This gap is partly addressed by the existence of minimum return requirements, which we discuss in the section on herding. However, beneficiaries’ interests ultimately depend on information disclosure, competition among providers and individual choice.

Neither the governing bodies of the pension funds nor their managing entities require any member representation. Chilean pension funds play a significant role in the corporate governance of publicly traded corporations in Chile. Indeed, pension funds form the main voice of minority shareholders in a market where the ownership structures of most local public corporations are concentrated in a few hands.

“There is negligible variation in return between the providers.”

Herding
The performance of the AFPs is measured against the pension fund system itself. The return ranges that managers have to observe vary by the type of fund. For Funds C, D and E, which have a lower equity exposure, the minimum return is defined as the lesser of 2% below the weighted-average real return over the previous 36 months, or 50% of the weighted-average real return over the same period. Funds with higher equity exposure, namely A and B, have a minimum return defined as the lesser of 4% below the weighted-average real return over the previous 36 months, or 50% of the weighted-average real return. (The lower minimum return target takes into account the higher volatility expected from the higher equity weighting of these funds.)

This constraint provides little incentive for AFPs to take differentiated investment positions. Consequently, there is negligible variation in return between the providers (see Table 4 below, which shows the returns for the six providers’ funds in the most risky category). This shows the behavioural response to a system which puts great weight on not diverging from the median.

Table 4: Nominal returns from type A funds

<table>
<thead>
<tr>
<th>Pension Funds Type A – Highest Risk</th>
<th>December 2015</th>
<th>Last 12 months to December 2015</th>
<th>Annual average over three years to December 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital</td>
<td>-2.10</td>
<td>8.09</td>
<td>10.45</td>
</tr>
<tr>
<td>Cuprum</td>
<td>-2.11</td>
<td>8.11</td>
<td>10.89</td>
</tr>
<tr>
<td>Habitat</td>
<td>-2.09</td>
<td>8.26</td>
<td>10.78</td>
</tr>
<tr>
<td>Modelo</td>
<td>-2.09</td>
<td>7.39</td>
<td>10.24</td>
</tr>
<tr>
<td>Planvital</td>
<td>-2.22</td>
<td>7.05</td>
<td>10.25</td>
</tr>
<tr>
<td>Provida</td>
<td>-2.07</td>
<td>7.72</td>
<td>10.38</td>
</tr>
<tr>
<td><strong>Average Return</strong></td>
<td><strong>-2.09</strong></td>
<td><strong>8.01</strong></td>
<td><strong>10.63</strong></td>
</tr>
</tbody>
</table>

It is difficult to be precise about an industry standard for costs because different institutions calculate costs in different ways, in particular depending on where they show the costs of employing external managers and performance fees for external funds. Costs can also vary substantially from year to year, depending on the incidence of performance fees.

Generally, however, costs can be grouped as:

- Governance and oversight costs (board members, actuary, asset consultant, audit etc.)
- Internal management costs (investment staff)
- The operational platform (accounting, custody, middle and back office)
- External management fees, both traditional ad valorem fees, and performance fees. Performance fees become particularly important for institutions with high weightings in private market assets, where such fees are often deducted from investment returns rather than being added to costs
- Transaction costs.

The variance between institutions is a function of the volume of assets, the balance between passive and active management and between external and internal management, and the proportion of private market assets, which typically incur higher management and transaction fees.

As a broad guide to industry norms, we have used a series of studies by CEM Benchmarking, a specialist Canadian investment information firm, which aggregates costs across similar investing institutions in similar size bands.

For the December 2013 DCLG study, produced by Hymans Robertson, CEM estimated that the benchmark cost for funds comparable to the large LGPS funds was 40.6 bps. This was based on a sample of funds ranging from £25 billion to £45 billion in size.

A broader 2013 study of 330 institutional investors concluded that average costs were 42 bps.

A further CEM study, published by the New Zealand Super Fund as context for their own data as of December 2014, found that the average investment cost of a group of funds in a range from £6.5 billion to £31 billion in size was 43 bps.

The main variable the CEM studies found was “implementation style”, i.e. the choices between active and passive, internal and external management, and private and public assets. The largest impact on costs in the “external-active” category came from the weightings in hedge funds and private equity, where fees are usually a multiple of those in other asset classes. The breakdown of the median fund in the broad peer group in the second study referred to above is shown in Table 5.

<table>
<thead>
<tr>
<th>Implementation Style</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal Passive</td>
<td>4</td>
</tr>
<tr>
<td>Internal Active</td>
<td>17</td>
</tr>
<tr>
<td>External Passive</td>
<td>12</td>
</tr>
<tr>
<td>External Active</td>
<td>67</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: CEM Benchmarking, 2014 data.

Against this background, the Hymans Robertson study of the LGPS found (based on extrapolating from a sample of 18 funds and controlling for asset allocation) that the average total investment costs of what they call the LGPS Fund Large was 44 bps. This was close to but slightly higher than the averages shown above, with the main differential being the greater use of external managers by the LGPS than the peer group.

To complement this work, we have shown in Table 6 the cost data for the group of individual funds we have analysed. The table demonstrates widely different outcomes in terms of costs and number of staff, depending on how each fund is organised.

The table shows that the outlier in terms of costs is clearly Norges Bank – demonstrating the benefits of enormous scale, a high proportion of assets managed internally with low tracking error, and little invested in private market assets (which is itself a function of the difficulty of a huge fund investing in illiquid asset classes).

At the other extreme is the CPPIB, which has built up a large internal team across many locations and has invested 40% in private markets. In its case, the cost of a high weighting in private assets has more than offset a high proportion of internal management. The Future Fund is obliged by its constitution to outsource all its investment management.

"In [CPPIB's] case, the cost of a high weighting in private assets has more than offset a high proportion of internal management."

Table 6 – Size, costs and investment structure of comparable funds outside the UK

<table>
<thead>
<tr>
<th>Fund</th>
<th>AUM (£ billions)</th>
<th>AUM as of</th>
<th>Cost latest financial year (bps)</th>
<th>No of employees (latest year end)</th>
<th>Active/passive %</th>
<th>External/internal %</th>
<th>Alternatives %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norges Bank</td>
<td>552</td>
<td>30/09/2015</td>
<td></td>
<td>6</td>
<td>428</td>
<td>Not disclosed</td>
<td>4/96</td>
</tr>
<tr>
<td>CPPIB</td>
<td>134.7</td>
<td>30/09/2015</td>
<td></td>
<td>85</td>
<td>1,157</td>
<td>20/0</td>
<td>12/88</td>
</tr>
<tr>
<td>Future Fund</td>
<td>58.5</td>
<td>31/12/2015</td>
<td>135*</td>
<td>112</td>
<td>Not disclosed</td>
<td>100/0</td>
<td>37</td>
</tr>
<tr>
<td>Alaska Permanent Fund</td>
<td>33.6</td>
<td>30/06/2015</td>
<td></td>
<td>21</td>
<td>36</td>
<td>88/12</td>
<td>82/18</td>
</tr>
<tr>
<td>FRR</td>
<td>28.9</td>
<td>31/12/2014</td>
<td>19</td>
<td>48</td>
<td>49/40</td>
<td>100/0</td>
<td>2.0**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VFMC</td>
<td>23.7</td>
<td>30/09/2015</td>
<td></td>
<td>34</td>
<td>80</td>
<td>Not disclosed</td>
<td>66/34</td>
</tr>
<tr>
<td>New Zealand Super Fund</td>
<td>13.7</td>
<td>31/12/2015</td>
<td></td>
<td>42</td>
<td>113</td>
<td>30/70</td>
<td>70/30</td>
</tr>
</tbody>
</table>

*The Future Fund splits its costs into an Indirect Cost Ratio (24 bps) and “look-through” costs (111 bps) which include an estimate of all performance fees on external vehicles.
**FRR is about to increase its weighting in infrastructure and real estate following an extension of the fund’s time horizon.
***Does not include "non-traditional strategies": absolute return funds, insurance and other non-traditional strategies.
Source: annual reports.

*In [CPPIB’s] case, the cost of a high weighting in private assets has more than offset a high proportion of internal management.*
The aspiration to reduce the costs of the LGPS is clearly a critical part of the current initiative. Hymans proposed maximum fee savings from (a) moving 100% of listed bonds and equities from active to passive management and (b) from using “lower cost” alternatives, mainly direct investments rather than funds of funds. Together these two actions would, after ten years, lead to savings of £470 million per annum, or 26 bps, bringing the investment costs down to 18 bps. There would be a further small saving from lower governance costs.

While it is hard to argue against looking for cost reductions where possible, there are a number of points to be made about the assumptions behind Hymans’ conclusions:

- A cost level of 20 bps or below would make the LGPS a significant outlier compared to funds of similar size outside the UK.
- No fund in Table 6, or any major fund, has invested 100% of its listed assets passively.
- Of the funds shown above, only two, the FRR and the Alaska Permanent Fund, come close to the 18 bps cost level. FRR has not up to now invested at all in private market assets because of the relatively short life of the fund. The Alaska Permanent Fund runs most of its assets actively and uses 71 external managers, but has lean staff levels itself (40). It is not clear if its stated management fees include performance fees.
- The aspiration to invest more in unlisted assets would lead to higher fees, offsetting at least some of the savings to be had from moving to direct management of alternatives.

We agree with the direction of all three recommendations, but we believe there is a limit to the extent to which reducing cost is compatible with maintaining fund returns. The logic of spending more than the absolute minimum on running a large asset owner is that higher costs flow through to higher returns. This is achieved either by adding value by active management (internal or external) in mainstream asset classes, by asset allocation, or by devoting more resources to private market assets.

It is not possible to analyse the value added by different organisations systematically, since different funds publish data in different ways. However, the following table aims to show value added relative to a policy or reference portfolio. This is distinct from whether each organisation has achieved its primary objective for its members, whatever that happens to be.

“A cost level of 30–35 bps for the asset pools would represent a significant saving from the current level, while giving flexibility to use some active management as well as alternatives.”
Table 7 – Active performance record of comparable funds

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Costs (bps)</th>
<th>Value added, net of costs (unless otherwise stated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norges Bank</td>
<td>6</td>
<td>25 bps return from active management, 5 years to 31 Dec 2014.</td>
</tr>
<tr>
<td>CPPIB</td>
<td>85</td>
<td>Cumulative C$5.2 billion value added net of operating expense against reference portfolio over 4 years to 31 March 2015. We estimate this is the equivalent of 65 bps pa.</td>
</tr>
<tr>
<td>Future Fund</td>
<td>135</td>
<td>Fund outperformed policy portfolio by 120 bps per annum over 3 years to 30 June 2015.</td>
</tr>
<tr>
<td>Alaska Permanent Fund</td>
<td>21</td>
<td>Fund outperformed benchmark by 110 bps (gross of fees) per annum over 5 years to 30 June 2015.</td>
</tr>
<tr>
<td>FRR</td>
<td>19</td>
<td>€184 million net value added since 2004.</td>
</tr>
<tr>
<td>VFMC</td>
<td>34</td>
<td>Fund outperformed benchmark by 133 bps per annum over 5 years to 30 June 2015.</td>
</tr>
<tr>
<td>New Zealand Super Fund</td>
<td>42</td>
<td>Performance relative to reference portfolio: 365 bps pa after costs over 5 years to 30 June 2015.</td>
</tr>
</tbody>
</table>

Source: annual reports

The conclusion to be drawn is that it is possible for funds in the £25 billion to £35 billion asset range to create value well in excess of their management costs. Indeed a crude calculation suggests that value added can be as much as nine times the management costs.

This sample is of funds that have a strong reputation and have developed a successful and independent culture. It can be argued that they are in an unusually strong position to attract talented staff and to secure the best deals in both public and private markets.

The 2013 CEM study of 330 institutional investors referred to above concluded that, on average, this larger group has also added value, net of costs, over a 20-year period, although the margin was lower than in our sample. Costs, at an average of 42 bps, came in very close to the Hymans/CEM figures. Applying them to the funds’ average returns of 58 bps a year cut gross value added to 16 bps net. However, one of the findings was that net value added increased with size. The fact that the average size of the funds in this study was about £13 billion – much smaller than in our sample – may explain some of the divergence with the conclusions derived from our narrower group above.

What this argues is that the new asset pools should give serious consideration to how they can achieve optimal net returns for the underlying authorities. Given the benefits of size likely to be enjoyed by the new funds, there should be a return from the amount spent on investment expertise – irrespective of whether that comes from internal or external sources. Minimising costs should not therefore be the primary objective of the governing bodies of the asset pools as they create their organisational structures.

“Given the benefits of size likely to be enjoyed by the new funds, there should be a return from the amount spent on investment expertise.”
Investmentation and Operational factors

As discussed above, the Government has left much of the detail of how the proposed asset pools will operate to the local authorities. Leaving aside the question of who decides asset allocation, there a number of structural questions to be answered before the pools are created, such as:

1. Who owns the management entities of the asset pools? There is no clear precedent for the proposed structure where, unlike in the Australian case, the underlying authorities may be dispersed across England and Wales.

2. Who is accountable to the Financial Conduct Authority for the proper operation of the asset pools? The FCA will hold each firm responsible for its conduct and will also expect each pool to have controlled functions such as chief executive, director and head of compliance.

3. How are the board members of the governing bodies to be appointed? If a large authority dominates the assets, how are the interests of smaller authorities to be protected?

4. Can the asset pools be operated by private sector entities? There seems to be no reason why an asset pool could not be run by a private firm, such as a passive manager, provided they achieve the same cost savings as the rest of the LGPS. However, the only example from overseas of privately operated pools is the Chilean system. All the other cases we have presented are fully state owned.

5. Can an authority switch asset pools if they are dissatisfied? Conversely, can a successful asset pool take on other clients, possibly from outside the LGPS? Reflecting our comments above on the benefits of a long-term horizon, we would recommend that the option to switch is only available in extremis, after a prolonged period of poor results.

6. Will the pools be equipped to run customised mandates? For example, an authority might in the future wish to put in place a liability-driven investment strategy; or want to use specialist approaches (such as “smart” beta) or alternative asset classes outside infrastructure.

7. If one pool develops particular expertise (e.g. in infrastructure or environmental, social and governance investing), can it be used by a wider range of authorities than its core members?

8. Will the pools be able to undertake co-investment in alternatives with major institutions outside the LGPS?

“We would recommend that the option to switch [fund] is only available in extremis, after a prolonged period of poor results.”
Conclusions

We believe that the reforms proposed for the LGPS present an excellent opportunity to set new standards of governance, performance and costs in the management of public sector pension investments. Moreover, there are a number of well-run investment institutions that could act as role models for the new British institutions. Based on our investigation of these international comparators, we suggest a number of areas where their experience could usefully inform the structure and ethos of the new LGPS arrangements:

**Governance** – any new investment pools should have clarity of objective, independence of action and transparency in operation. The standards set by, for example, the Alaska Permanent Fund and Australia’s Future Fund are instructive here. It is important, too, that the new local authority pools promote a long-term culture in their relationships with their investments.

**Performance** – creating the conditions for good performance is at least as important as reducing costs. Various studies of possible peer groups, both by us and others, suggest that judiciously managed funds can add significant value above and beyond their management fees. The New Zealand Super Fund is a good example of an institution generating very high returns, despite incurring higher than average costs for its size. Such outperformance will help reduce funding deficits.

**Costs** – given sufficient size and professionalism, substantial cost savings can be made in the new investment pools. However, it is important to recognise that there is inevitably a three-way trade-off between size, cost reduction and performance. The giant portfolio managed by Norges Bank pays wafer-thin costs, but outperformance is correspondingly small. By contrast, costs for Victorian Funds Management in Australia – similar in size to the proposed UK pools – are significantly lower than those of the current LGPS, yet it has generated substantial outperformance.

We hope that this paper can contribute usefully to the establishment of the new LGPS arrangements. We certainly believe that there is a convincing case for putting the principles we have discussed at the heart of the new funds. Were that to happen, we think they would have a much better chance of achieving their objectives of cutting costs while maintaining investment performance and, at the same time, capitalising on the opportunity to recast the governance and management of local government pensions to world-class levels.

“It is important to recognise that there is inevitably a three-way trade-off between size, cost reduction and performance.”
Appendix 1: Governance

We have drawn from the OECD Guidelines for Pension Fund Governance (published in 2009), which set out global best practice in this area, and have analysed our international peer group against the OECD guidelines.

i. Governing Body
The OECD guidelines recommend that the governing body should retain ultimate responsibility for the pension fund, even when delegating certain functions to external service providers. We have shown below for the seven funds we have analysed the split between management entity and governing body.

<table>
<thead>
<tr>
<th>Country</th>
<th>Management Entity</th>
<th>Governing Body</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Future Fund Management Agency</td>
<td>Future Fund Board of Guardians</td>
</tr>
<tr>
<td></td>
<td>Victorian Funds Management Corporation</td>
<td>VFMC Board</td>
</tr>
<tr>
<td>Canada</td>
<td>Canada Pension Plan Investment Board (CPPIB)</td>
<td>VFMC Board</td>
</tr>
<tr>
<td>France</td>
<td>Pension Reserve Fund (FRR)</td>
<td>Supervisory Board (“Conseil de Surveillance”)</td>
</tr>
<tr>
<td>New Zealand</td>
<td>The Guardians of New Zealand Superannuation</td>
<td>The Guardians of New Zealand Superannuation</td>
</tr>
<tr>
<td>Norway</td>
<td>Norges Bank Investment Management (an arm of the central bank) for the “Fund Global”</td>
<td>Norwegian Parliament and the Ministry of France</td>
</tr>
<tr>
<td>USA</td>
<td>Alaska Permanent Fund Corporation</td>
<td>Alaska Permanent Fund</td>
</tr>
</tbody>
</table>
ii. Board Nomination Process

According to the OECD governance guidelines, the membership of the governing body of a pension fund should be subject to minimum suitability (or non-suitability) standards in order to ensure a high level of integrity, competence, expertise and professionalism in the governance of the pension fund. Furthermore, the governing body should collectively have the necessary skills and knowledge to oversee all the functions performed by a pension fund, and to monitor those delegates and advisers to whom such functions have been delegated.

The size of the board is also important. Although it should reflect the nature and scope of the organisation, too large a board can impede efficient decision making.

<table>
<thead>
<tr>
<th>Country</th>
<th>Fit and proper criteria</th>
<th>Nomination</th>
<th>Length of appointment</th>
<th>Removal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia Future Fund</td>
<td>Guardians are selected for their expertise in investment management and corporate governance. Must be outside government.</td>
<td>Board members are appointed by the responsible ministers. Board consists of a chair and six other members.</td>
<td>Each Guardian is appointed on a part-time basis for a term of up to five years.</td>
<td></td>
</tr>
<tr>
<td>Australia – VFMC</td>
<td>The VFMC board benefits from members with broad experience in asset management, the public sector and business.</td>
<td>Directors are appointed by the Governor in Council with the chair appointed by the State Treasurer.</td>
<td>Directors are appointed for three years and are eligible to be reappointed.</td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>Directors must have experience in investment, business and finance.</td>
<td>The 12 directors are appointed by the finance minister from a list drawn up by a nomination committee.</td>
<td>Directors have three-year terms for a maximum of three terms (nine years in total).</td>
<td>Directors may only be removed for cause.</td>
</tr>
<tr>
<td>France</td>
<td>Two of the twenty members of the supervisory board must be individuals with recognised credentials in fields considered to be relevant to the FRR's stated missions.</td>
<td>Members are appointed by the National Assembly (lower house of parliament) (two), the Senate (two), various ministries (four), trade unions (five) and employer and self-employed associations (five).</td>
<td>Members that are not appointed by governmental authorities have six-year terms.</td>
<td></td>
</tr>
<tr>
<td>New Zealand</td>
<td>All board members must have experience, training and expertise in investment management.</td>
<td>Between five and seven board members are appointed by the Minister of Finance via a nomination committee. Between five and seven members.</td>
<td>Board members are appointed for up to five years.</td>
<td>Board members can be dismissed for reasons that the Minister's opinion justifies their removal.</td>
</tr>
<tr>
<td>Norway</td>
<td>The governing body is parliament and the Ministry of Finance.</td>
<td>Not applicable.</td>
<td>Not applicable.</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>USA Alaska Permanent Fund</td>
<td>Board has six members: the Commissioner of Revenue, one head of department of the state, and four public members with “recognized competence and experience in finance, investment or other business management”.</td>
<td>The state governor appoints public members for staggered four-year terms.</td>
<td>Four years.</td>
<td>Board members may only be removed for cause.</td>
</tr>
</tbody>
</table>
iii. Independence
Board members should be appointed following a transparent selection and nomination process.

<table>
<thead>
<tr>
<th>Fund Name</th>
<th>Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Australia Future Fund</strong></td>
<td>The Board of Guardians operates independently from the government. This independence is emphasised in the following ways:</td>
</tr>
<tr>
<td></td>
<td>- The expenses of the Funds are met from the assets of the Funds themselves, rather than from appropriations through parliament.</td>
</tr>
<tr>
<td></td>
<td>- The Board must be consulted on draft investment directions which must be consistent with the requirements of the legislation. Any submissions the Board makes on a draft direction must be tabled in parliament. The investment mandates for each of the Funds clearly define the risk and return requirements and timeframe for investment activity. The legislation imposes few limitations on asset allocation, selection of markets or portfolio design.</td>
</tr>
<tr>
<td></td>
<td>- Board members must be drawn from outside government and must meet the legislated requirements of having substantial expertise and professional credibility in investing or managing financial assets or in corporate governance.</td>
</tr>
<tr>
<td><strong>Victorian Funds Management Corporation</strong></td>
<td>Directions (from the State Treasurer) may relate to corporate performance measures, but must not be in relation to an investment decision, dealings with property or the exercise of a voting right. Any direction must be published in the Government Gazette and VFMC annual report.</td>
</tr>
<tr>
<td><strong>Canada Pension Plan Investment Board</strong></td>
<td>CPPIB operates independently of the Canada Pension Plan (CPP, the asset owner) and at arm’s length from the federal and provincial governments that are jointly responsible for the CPP.</td>
</tr>
<tr>
<td></td>
<td>The Board, not government, approves investment policies and makes critical operational decisions, such as the hiring of the president and CEO and the setting of management compensation.</td>
</tr>
<tr>
<td></td>
<td>Changing the legislation governing the CPPIB requires the cooperation of the stewards – the federal and provincial finance ministers who oversee the CPP. This process mirrors the constitutional amending formula and requires agreement among the federal government and two-thirds of the provinces representing two-thirds of the population.</td>
</tr>
<tr>
<td><strong>Fonds de Réserve pour les Retraites</strong></td>
<td>The Conseil de Surveillance represents a range of constituencies.</td>
</tr>
<tr>
<td><strong>New Zealand Superannuation Fund</strong></td>
<td>As an autonomous Crown entity, the Guardians are legally separate from the Crown. The Fund has operational independence in relation to investment decisions. Every five years there is an independent review of how effectively and efficiently the Guardians are performing. The terms of the review are set by the Minister of Finance, who also appoints an independent person to conduct the review. The report is then presented to parliament. Remuneration is met out of the revenues of the Fund.</td>
</tr>
<tr>
<td><strong>Government Pension Fund Global</strong></td>
<td>Norges Bank makes investment decisions and exercises ownership rights independently of the Ministry of Finance.</td>
</tr>
<tr>
<td><strong>Alaska Permanent Fund</strong></td>
<td>Public members have a staggered four-year term. Only two of the four Board members are employed by the state government.</td>
</tr>
</tbody>
</table>
Clark and Urwin developed this 12-factor best practice model based on their experience of working with a range of organisations and correlating successful outcomes with strong governance\textsuperscript{23}. Although performance was not the only criteria for measuring success, “almost all of our best-practice funds had a performance margin 2% per annum or more over their benchmarks”.

<table>
<thead>
<tr>
<th><strong>Mission clarity</strong></th>
<th>Clarity of the mission and the commitment of stakeholders to the mission.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Investor executive</strong></td>
<td>The use of a highly investment competent investment function tasked with clearly specified responsibilities, with clear accountabilities to the investment committee.</td>
</tr>
<tr>
<td><strong>Effective time budget</strong></td>
<td>Resourcing each element in the investment process with an appropriate budget considering impact and required capabilities.</td>
</tr>
<tr>
<td><strong>Required competencies</strong></td>
<td>Selection to the board and senior staff guided by: numeric skills, capacity for logical thinking, ability to think about risk in the probability domain.</td>
</tr>
<tr>
<td><strong>Leadership</strong></td>
<td>Being evident at the board, investment committee and executive level, with the key role being the investment committee Chairman.</td>
</tr>
<tr>
<td><strong>Effective compensation</strong></td>
<td>Effective compensation practices used to build bench strength and align actions to the mission, different strategies working according to fund context.</td>
</tr>
<tr>
<td><strong>Strong beliefs</strong></td>
<td>Strong investment philosophy and beliefs commanding fund-wide support that aligns with operational goals and informs all investment decision-making.</td>
</tr>
<tr>
<td><strong>Competitive positioning</strong></td>
<td>Frame the investment philosophy and process by reference to the institution’s comparative advantages and disadvantages.</td>
</tr>
<tr>
<td><strong>Risk budget</strong></td>
<td>Frame the investment process by reference to a risk budget aligned to goals and incorporates an accurate view of alpha and beta.</td>
</tr>
<tr>
<td><strong>Real-time decisions</strong></td>
<td>Utilise decision-making systems that function in real-time not calendar-time.</td>
</tr>
<tr>
<td><strong>Manager line-up process</strong></td>
<td>The effective use of external managers, governed by clear mandates, aligned to goals, selected with rigorous application of fit for purpose criteria.</td>
</tr>
<tr>
<td><strong>Learning organisation</strong></td>
<td>Work to a learning culture which deliberately encourages change and challenges the commonplace assumptions of the industry.</td>
</tr>
</tbody>
</table>

\textsuperscript{23} Best-practice pension fund governance, Gordon L. Clark and Roger Urwin, Oxford University, December 2007.
A study of global best practice in government funds: the opportunity for the LGPS